

REMARKS

1. In response to the Office Action mailed October 6, 2004, Applicants respectfully request reconsideration. Claims 53-112 were last presented for examination. In the outstanding Office Action, claims 91-97 were rejected. Claims 53-90 were allowed and claims 98-112 were objected to. Claims 73, 91, 97, 98 and 107 have been amended. Claim 108 has been canceled and claim 113 has been added in this paper. Thus, upon entry of this paper, claims 53-107 and 109-113 will be pending in this application. Of these sixty (60) claims, four claims (claim 53, 73, 91 and 97) are independent. Based on the above Amendments and following Remarks, Applicants respectfully request that the outstanding objections and rejections be reconsidered, and that they be withdrawn.

Art of Record

2. Applicants acknowledge receipt of form PTO-892 identifying additional references made of record by the Examiner.

Election/Restrictions

3. Applicants note with appreciation the withdrawal of the Election/Restriction Requirement mailed July 29 2004.

Allowable Subject Matter

4. Applicants note with appreciation the Examiner's indication that claims 53-90 are allowable and that claims 98-112 would be in condition for allowance if combined with their respective base and intervening claims.

Claim Objections

5. The Examiner has objected to claims 73 and 91 because of various informalities. Claims 73 and 91 have been amended to correct these deficiencies thereby accommodating the objections. Withdrawal is respectfully requested.

Rejection of Claims 91-96

6. Claims 91-96 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,166,864 to Chitwood, *et al.* (hereinafter, "Chitwood"). Based upon the above Amendments and following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

7. Applicants' invention, as recited in amended claim 91, recites "[a] printed circuit board comprising: a printed wiring board; a component adapted to be detachably mounted on said printed wiring board; a conformal EMI shield that coats a surface of said printed circuit board and said component; and a coupling mechanism for electrically connecting said conformal EMI shield which coats a surface of said component with said conformal EMI shield which coats a surface of said printed circuit board when said component is mounted on said printed wiring board."

8. In contrast, Chitwood discloses a conformal coating for printed circuit boards which have components permanently mounted to the printed wiring board. The dielectric layers 26 and 28, as well as the metallic layers 32-40 of Chitwood are applied to the entire printed circuit board to provide one permanent, contiguous layer thereon. (*See*, Chitwood, col. 2, ln. 58-col. 3. ln. 34.) Chitwood neither discloses, teaches nor suggests providing "a component adapted to be detachably mounted on a printed wiring board." As such, there is no consideration in Chitwood of providing a coupling mechanism "for electrically connecting" the two claims EMI shields; i.e., "said conformal EMI shield which coats surfaces of said component with said conformal EMI shield which coats surfaces of said printed circuit board" when said component is mounted on said printed wiring board." For at least these reasons, Applicants respectfully assert that claim 91, as amended, is patentable over Chitwood and the other art of record. Dependent claims 92-96 are patentable for at least the same reasons.

Rejection of Claim 97

9. Claim 97 has been rejected under 35 U.S.C. §102(b) as being anticipated by Chitwood and U.S. Patent No. 5,867,371 to Denzene, *et al.* (hereinafter, "Denzene"). Based upon the above Amendments and following Remarks, Applicants respectfully request reconsideration and withdrawal of these rejections.

10. Claim 97 has been amended to include the recitations of dependent claim 108, and claim 108 has been canceled. As noted, claim 108 has been objected to for depending on a rejected base claim. Claim 97, as amended, contains the recitations of claim 108, its base claim (claim 97) and all intervening claims (none), with the exception of the language directed to the coupling mechanism, which is now provided in new claim 113.

11. Applicants assert that claim 97 as amended, is in condition for allowance. Claim 97, as amended, recites “[a] printed circuit board comprising: a printed wiring board with at least one surface trace ... [and] an electrically continuous EMI shield conformingly adhered to top and bottom surfaces of said printed circuit board ... wherein said EMI shield and said at least one surface trace are constructed and arranged such that said at least one surface trace has a desired characteristic impedance.”

12. Chitwood, introduced above, neither discloses, teaches nor suggests providing an “EMI shield and said at least one surface trace are constructed and arranged such that said at least one surface trace has a desired characteristic impedance.” In fact, there is no consideration whatsoever of the characteristic impedance of the surface traces on Chitwood’s printed wiring board.

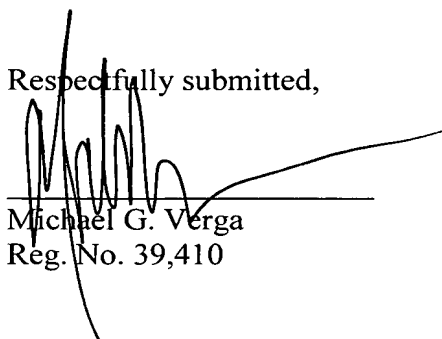
13. Denzene is directed to a shielded cover assembly for printed circuit boards comprising separately manufactured, preformed covers which are secured to an existing printed circuit board. (*See*, Denzene, Figure 1, Abstract, col. 3, ln. 48- col. 4, ln. 56.) Denzene’s covers neither “conformingly adhered to top and bottom surfaces [of the printed wiring board]” nor are they “constructed and arranged such that said at least one surface trace [of the printed wiring board] has a desired characteristic impedance” as recited in Applicants’ claim 97.

14. For at least the above reasons, Applicants’ invention as recited in amended claim 97 is patentable over the art of record. Accordingly, Applicants respectfully request that the rejection of claim 97 be reconsidered, and withdrawn.

Conclusion

15. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,



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